Chart 14240 (Plan D) NM 1/03

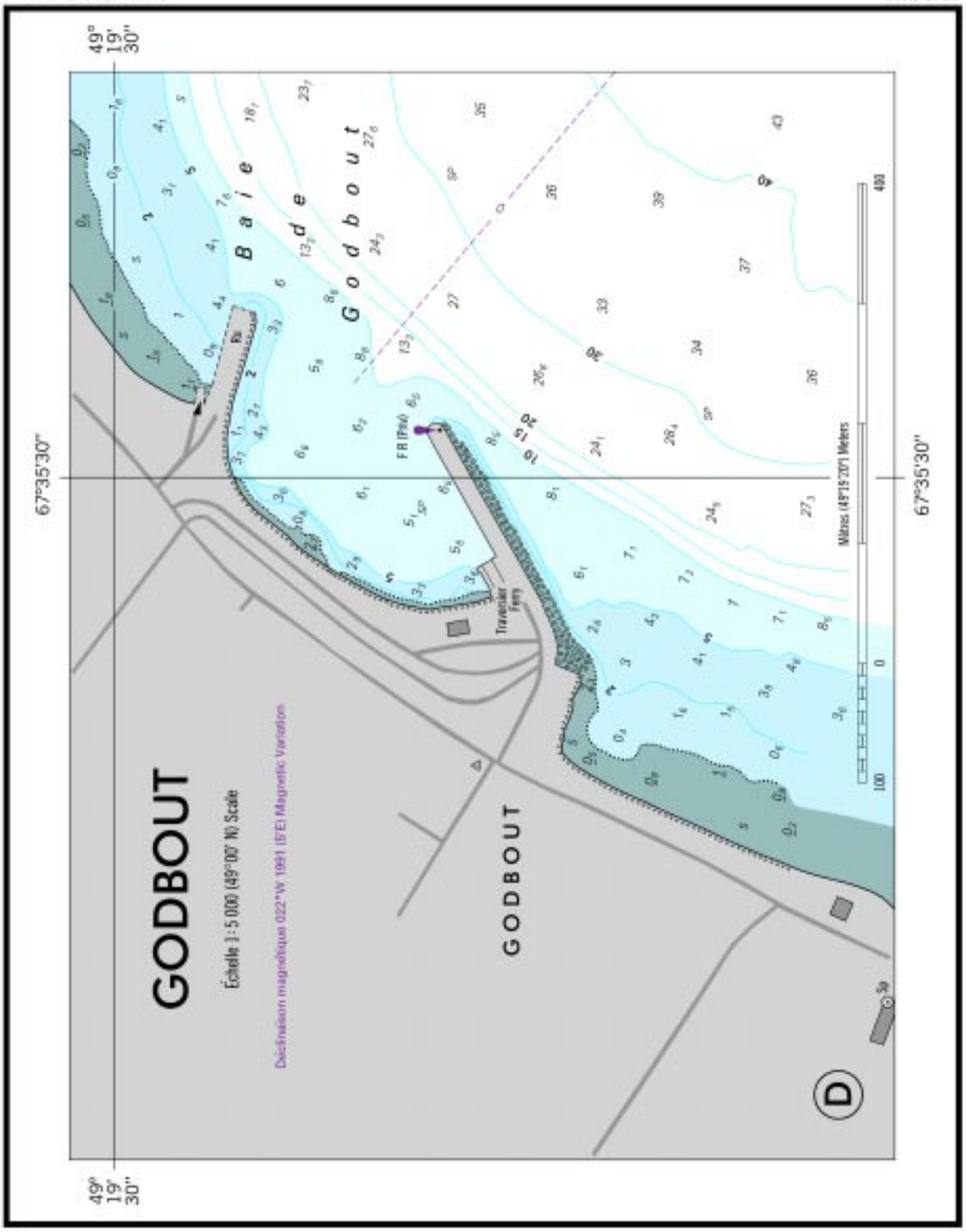

Chart 97245 NM 1/03

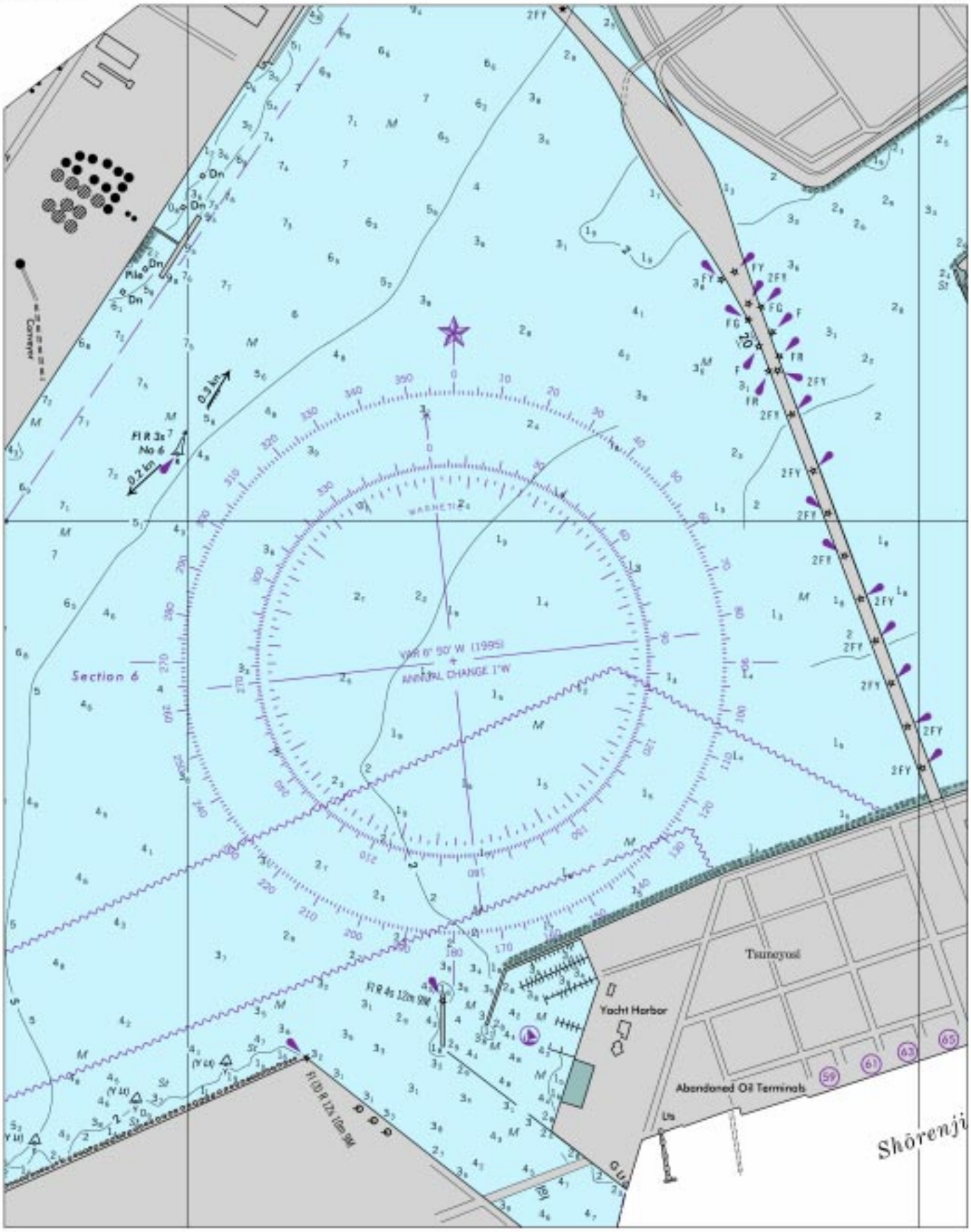

Chart 11323 NM 1/03

GALVESTON BAY ENTRANCE - CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2002

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT).						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL	43.0	46.0	43.0	37.0	9-02	800-1000	7.5	45
OUTER BAR CHANNEL	39.0	45.0	47.0	48.0	9-02	800	1.5	45
INNER BAR CHANNEL	38.0	42.0	43.0	37.0	9-02	800	2.9	45

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11324 NM 1/03

GALVESTON BAY AND HOUSTON SHIP CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2002

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
GALVESTON HARBOR:								
ENTRANCE CHANNEL	43.0	46.0	43.0	37.0	9-02	800-1000	7.5	45
OUTER BAR CHANNEL	39.0	45.0	47.0	48.0	9-02	800	1.5	45
INNER BAR CHANNEL	38.0	42.0	43.0	37.0	9-02	800	2.9	45
BOLIVAR ROADS CHANNEL	48.0	48.0	46.0	41.0	9-02	800	0.7	45
HOUSTON SHIP CHANNEL:								
BOLIVAR ROADS TO LOWER END OF MORGAN PT.	29.0	34.0	40.0	34.0	6-01; 7-02	400-530	23.4	40
GALVESTON CHANNEL	25.0	31.0	34.0	24.0	7-02	1125-1075	3.5	40
TEXAS CITY CHANNEL	36.0	42.0	42.0	39.0	7-02	400	5.9	40
TEXAS CITY TURNING BASIN	38.0	39.0	40.0	38.0	7-02	1200	0.5	40

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11375 NM 1/03

HORN ISLAND PASS PASCAGOULA HARBOR AND BAYOU CASOTTE CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUN 2002 AND SURVEYS TO AUG 2002

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
HORN ISLAND PASS CHANNEL	40.7	40.3	33.2	8-00	450	4.4	40.0
PASCAGOULA CHANNEL	32.3	34.2	34.8	11-01; 1,6,8-02	350	10.8	38.0
TURNING BASIN	34.4	38.0	37.6	8-02	950	0.4	38.0
BAYOU CASOTTE CHANNEL	39.4	42.0	39.8	6-02	350	3.3	42.0
TURNING BASIN	42.0	42.0	42.0	6-02	1000	0.3	42.0

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11412 NM 1/03

TAMPA BAY CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAY 2002 AND SURVEYS TO MAY 2002

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
EGMONT CHANNEL	26.6	42.9	44.8	38.6	5-02	700-1000	3.9	45
MULLET KEY CHANNEL	39.9	43.0	41.1	36.1	5-02	600-900	2.9	43
CUT A CHANNEL	39.9	42.5	42.6	41.9	5-02	500-700	2.7	43
CUT B CHANNEL	42.8	43.3	43.0	42.3	5-02	500-700	3.4	43
CUT C CHANNEL	42.8	44.3	44.3	42.9	5-02	500-750	1.7	43
CUT D CHANNEL	41.5	42.9	43.1	42.2	5-02	500-650	2.1	43
CUT E CHANNEL	42.1	42.2	42.8	42.9	5-02	500-700	2.1	43
CUT F CHANNEL	41.1	43.3	43.1	42.0	5-02	500	1.6	43
EAST WIDNER	42.6	43.0	40.8	41.2	5-02	0-2880	0.4	43
WEST WIDNER	32.7	33.9	34.6	35.0	5-02	0-970	0.25	34
CUT G CHANNEL	32.5	34.6	34.9	33.4	4-01; 4-02	400	2.7	34
GADSDEN PT. CUT	40.7	41.7	43.8	42.0	3-02	500	3.05	43

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11415 NM 1/03

TAMPA BAY ENTRANCE CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAY 2002 AND SURVEYS TO MAY 2002

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
EGMONT CHANNEL	26.6	42.9	44.8	38.6	5-02	700-1000	3.9	45
MULLET KEY CHANNEL	39.9	43.0	41.1	36.1	5-02	600-900	2.9	43
CUT A CHANNEL	39.9	42.5	42.6	41.9	5-02	700	2.7	43
CUT B CHANNEL	42.8	43.3	43.0	42.3	5-02	700	3.4	43

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11416 NM 1/03

TAMPA BAY CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAY 2002
AND SURVEYS TO MAY 2002

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
MULLET KEY CHANNEL	39.9	43.0	41.1	36.1	5-02	600-900	2.9	43
CUT A CHANNEL	39.9	42.5	42.6	41.9	5-02	500-700	2.7	43
CUT B CHANNEL	42.8	43.3	43.0	42.3	5-02	500-700	3.4	43
CUT C CHANNEL	42.8	44.3	44.3	42.9	5-02	500-750	1.7	43
CUT D CHANNEL	41.5	42.9	43.1	42.2	5-02	500-650	2.1	43
CUT E CHANNEL	42.1	42.2	42.8	42.9	5-02	500-700	2.1	43
CUT F CHANNEL	41.1	43.3	43.1	42.0	5-02	500	1.6	43
EAST WIDENER	42.6	43.0	40.8	41.2	5-02	0-2880	0.4	43
WEST WIDENER	32.7	33.9	34.6	35.0	5-02	0-970	0.25	34
CUT G CHANNEL	32.5	34.6	34.9	33.4	4-01; 4-02	400	2.7	34
G TO J WIDENER	35.8	35.9	35.1	34.5	4-02	0-770	.52	34
CUT J CHANNEL	32.1	35.2	34.0	33.9	4-02	400-450	1.2	34
CUT J2 CHANNEL	35.4	37.0	36.6	35.9	4-02	400-450	0.9	34
CUT K CHANNEL	31.1	36.2	36.1	32.4	4-02	400	2.0	34
CUT K TURNING BASIN	29.4	32.4	37.7	31.6	4-02	400-750	0.5	34
GADSDEN PT. CUT	40.7	41.7	43.8	42.0	3-02; 5-02	500	3.05	43
HILLSBOROUGH BAY								
CUT A CHANNEL	41.0	42.6	39.1	36.4	3-02	500	1.0	43
A TO C WIDENER	36.0	37.4	39.3	40.9	3-02	0-1000	0.7	43
CUT C CHANNEL	35.8	40.1	38.5	36.7	3-02	500	5.6	43
CUT D CHANNEL	31.3	36.1	36.6	31.9	3-02	400	1.0	41
SEDDON CHANNEL	8.2	14.5	19.7	21.4	3-02	200	1.1	12
GARRISON CHANNEL (A)	24.6	27.2	27.9	28.3	3-02	300	0.4	30
SPARKMAN CHANNEL	27.5	35.5	35.2	30.3	3-02	400	1.2	34
YBOR TURNING BASIN	34.4	36.1	33.5	30.3	3-02	—	0.3	34
YBOR CHANNEL	29.3	32.2	31.0	30.2	3-02	400	0.6	34
PORT SUTTON ENTRANCE CHANNEL	41.5	42.3	42.8	38.1	3-02	400	0.3	43
SOUTH WIDENER	37.7	37.3	36.9	35.9	3-02	0-540	0.3	43
PORT SUTTON TURNING BASIN	37.2	40.2	39.8	40.9	3-02	400-1930	0.4	43
EAST BAY CHANNEL								
TO TURNING BASIN	43.3	44.9	43.9	42.7	3-02	600	0.6	43
TURNING BASIN	44.1	45.0	45.1	45.1	3-02	300-800	0.3	43
NORTHEAST OF TURNING BASIN	43.9	44.4	44.0	43.5	3-02	300	0.4	43
UPPER EAST BAY								
CHANNEL TO UPPER BASIN	34.0	35.0	35.0	34.9	3-02	300	0.6	34
TURNING BASIN	33.9	35.5	35.1	32.0	3-02	300-789	0.5	34

A. GARRISON CHANNEL HAS BEEN DEAUTHORIZED AS A FEDERALLY MAINTAINED NAVIGATION PROJECT. SHOALING THROUGHOUT WESTERN PORTION OF CHANNEL.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11506 NM 1/03

BRUNSWICK HARBOR CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2002

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BAR CHANNEL							
(ST SIMON RANGE)	27.5	30.0	A27.0	10-02	500	7.7	32
PLANTATION CREEK RANGE	34.0	40.0	39.0	10-02	400	1.8	32
JEKYLL ISLAND RANGE	28.5	32.0	32.0	10-02	400	1.9	30
CEDAR HAMMOCK RANGE	30.0	31.0	30.0	10-02	400	1.4	30
BRUNSWICK PT CUT RANGE	27.5	29.0	26.5	10-02	400	2.4	30
EAST RIVER							
LOWER REACH	B28.5	30.0	28.0	10-02	400	1.1	30
UPPER REACH	26.5	27.0	25.5	10-02	350	1.0	27
EAST RIVER TURNING BASIN	26.5	26.0	26.0	10-02	750	0.2	30
TURTLE RIVER LOWER RANGE	34.0	31.0	30.0	10-02	300	1.7	30
BLYTHE ISLAND RANGE	31.0	26.0	26.0	10-02	300	1.5	30
TURTLE RIVER UPPER RANGE	28.0	27.5	26.0	10-02	300	1.7	30
SOUTH BRUNSWICK RIVER	31.0	32.0	29.5	10-02	400	1.3	30

A. OBSTRUCTION REPORTED WITH A DEPTH OF 29 FEET, LOCATED AT 31°04'06.6"N; 081°16'35.7"W.
B. THE EAST RIVER, LOWER REACH WIDENER LEAST DEPTHS WERE 28.0 FEET, LOCATED 50 FEET INSIDE THE CHANNEL LIMIT, AND 31.0 FEET, LOCATED 150 FEET INSIDE THE CHANNEL LIMIT FROM THE LEFT SIDE.
NOTE - FOR THE LEFT OUTSIDE AND RIGHT OUTSIDE QUARTERS, DEPTHS GIVEN REPRESENT CONDITIONS 50 FEET INSIDE THE CHANNEL LIMITS. (EXCEPT FOR THE EAST RIVER TURNING BASIN)
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 14839 NM 1/03

CLEVELAND HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2002 AND REPORTS TO SEP 2002

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)
LAKE APPROACH CHANNEL	28.4	31.8	30.4	27.3	5-02	600-750	0.22	29
ENTRANCE CHANNEL	27.4	29.1	29.1	25.5	5-02	225-750	0.22	28
CUYAHOGA RIVER								
PIER RANGE	A20.4	27.8	28.0	B20.3	5-8-02	230	0.30	27
THENCE TO LORAIN								
CARNEGIE VIADUCT BRIDGE	10.7	22.2	22.4	11.1	5-8-02	100-700	2.69	23
THENCE TO END OF PROJECT	C10.7	D22.0	E18.9	F14.0	5-8-02	110-400	3.11	23
OLD RIVER								
FROM CUYAHOGA RIVER								
TO END OF PROJECT	16.3	22.2	22.1	G17.6	3,4-02	125-200	1.10	27
EAST BASIN								
AIRPORT RANGE	H20.0	23.6	23.5	20.3	8,9-01	500	3.11	25
TURNING BASIN	22.8	22.9	23.3	22.3	8,9-01	400-1600	0.33	25
EASTERN SECTION	22.6	23.2	22.4	17.3	8,9-01;5-02	1250-1540	0.72	27
WESTERN SECTION	26.1	28.3	23.7	21.0	5-02	1300-1540	0.28	28
WEST BASIN	I24.3	J25.2	K24.1	L20.2	9-01;5-02	1150-1570	0.91	28

A. EXCEPT FOR SHOALING TO 16.2 FEET AT 41°30'00.5"N 081°42'31.4"W.
B. EXCEPT FOR SHOALING TO 16.1 FEET AT 41°29'59.8"N 081°42'34.3"W.
C. EXCEPT FOR SHOALING TO 7.3 FEET AT 41°29'22.5"N 081°40'59.8"W AND 9.6 FEET AT 41°27'52.9"N 81°40'35.8W.
D. EXCEPT FOR SHOALING TO 10.8 FEET IN LAST 600 FEET OF QUARTER.
E. EXCEPT FOR SHOALING TO 9.1 FEET IN LAST 1000 FEET OF QUARTER.
F. EXCEPT FOR SHOALING TO 1.9 FEET IN LAST 900 FEET OF QUARTER AND 2.1 FT AT 41°29'10.4"N 081°40'47.0"W.
G. EXCEPT FOR SHOALING TO 8.3 FEET AT 41°29'51.2"N 081°42'43.9"W.
H. EXCEPT FOR SHOALING TO 18.7 FEET AT 41°31'08.3"N 081°41'19.1"W AND 19.4 FEET AT 41°31'52.3"N 081°41'01.6"W.
I. EXCEPT FOR SHOALING TO 20.5 FEET IN WESTERN 450 FEET OF PROJECT.
J. EXCEPT FOR SHOALING TO 18.4 FEET IN WESTERN 550 FEET OF PROJECT.
K. EXCEPT FOR SHOALING TO 16.1 FEET IN WESTERN 900 FEET OF PROJECT.
L. EXCEPT FOR SHOALING TO 15.6 FEET IN WESTERN 500 FEET OF PROJECT.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 51061 NM 1/03

VOLCANIC ACTIVITY

Intense volcanic activity is occuring near Ponta da Serreta. Volcanic outcrops and gas releases should be expected. Changes in bathymetry, particularly in minimum depths, as well as reduced visibility and the appearance of floating obstacles are likely to occur.

Chart 62433 NM 1/03

CAUTIONS

1. Dredged depths charted within Mina Ash Shuwaykh and the approach channel are subject to siltation and liable to change. For the latest information, mariners are advised to consult the Port Authority and Sailing Directions.
2. The limits of this chart fall within a former mined area in which mines could still present a hazard. Anchoring, fishing or seabed operations are not recommended anywhere within this area. However, where anchoring is necessary, it should be carried out within the designated areas as directed by the local authority. Additionally, drifting mines may be encountered anywhere. For the latest details on the former mined area, see Annual Notice to Mariners.

Chart 62439 (Panel B) NM 1/03

CAUTION

1. Mariners should navigate with extreme caution in Shatt al Arab. It was reported in 1997 that the maximum permissible draft for vessels using the Shatt al Arab was 5 meters. The river has not been systematically maintained since 1980 and siltation has been heavy. In addition, there are reports of numerous uncharted wrecks and obstructions in the river. Some of the wrecks may contain explosive material and underwater obstructions may exist where bridges and jetties have been removed or destroyed.
2. The aids to navigation on this chart are reported to be unreliable. They may be missing, unlit or out of position. Vessels should navigate with particular caution.